

## WHAT IS CLAIMED IS:

1. A method of managing the delivery of an order from at least one supplier to a respective delivery agent, and from the delivery agent to a respective buyer, given order information, said method comprising the steps of:

5 determining a first potential arrival date of the order to a respective delivery agents location, based on the order request date and the buyer's address;

determining the ability of the respective delivery agent to ship the order based the first potential arrive date request; and

determining a delivery date to the buyer when there is sufficient delivery agent capacity to ship the order to the buyer's address.

10 2. The method of managing the delivery schedule as recited in claim 1, wherein the step of calculating a first potential arrival date of the order further comprises the step of selecting the first potential arrival date from a supplier ship schedule based on the day the order is placed plus a fixed delay.

15 3. The method of managing the delivery schedule as recited in claim 2, wherein the step of determining the ability of the respective delivery agent to ship further comprises the step of calculating the number of slots to be shipped from a work unit matrix.

20 4. The method of managing the delivery schedule as recited in claim 3, further comprises the step of multiplying each item in the order by a work unit selected from a work unit matrix to determine the number of slots for each order.

25 5. The method of managing the delivery schedule as recited in claim 3, wherein the step of determining when there is sufficient capacity to ship the order further comprising the step of determining the first available date that the order can be completely shipped to the buyer based on a capacity matrix and based on the number of available delivery slots.

6. The method of managing the delivery schedule as recited in claim 4, further comprising the step of updating the electronic manifest indicating the order ship date and the additional capacity utilized.

7. The method of managing the delivery schedule as recited in claim 3, further comprising the step of getting the zip code to which the order is to be delivered and the brand of the respective good in the order.

8. The method of managing the delivery schedule as recited in claim 7, further comprising the step of getting a respective supplier ship schedule based on the zip code and brand of good ordered.

9. The method of managing the delivery schedule as recited in claim 8, further comprising the step of selecting a delivery agent and a respective capacity matrix based on the zip code of the order.

10. The method of managing the delivery schedule as recited in claim 9, further comprising the step of determining the first potential ship date to the buyer's address based on the capacity of the delivery agent and the delivery schedule of the delivery agent.

11. The method of managing the delivery schedule as recited in claim 1, further comprising the step of allowing order changes to be made based on the users security level clearance.

12. The method of managing the delivery schedule as recited in claim 11, further comprising the step of updating the electronic manifest with status information.

13. The method of managing the delivery schedule as recited in claim 12, further comprising the step of running said delivery management system when a reschedule has been requested.

14. The method of managing the delivery schedule as recited in claim 1, wherein said order information comprises data selected from the group including, the order date, the model number, the quantity of items, the brand of the item, the service to be

selected, the requested delivery date, the buyer's delivery address, the security level clearance, and status information.

15. A method of managing the delivery of an order from at least one supplier to a respective delivery agent, and from the delivery agent to a respective buyer, given order information, said method comprising the steps of:

determining a first potential arrival date of the order to a respective delivery agents location, based on the order request date and the buyer's address;

determining the ability of the respective delivery agent to ship the order within a set of potential delivery dates based the first potential arrive date request and the first date a respective delivery agent can ship the goods; and

selecting the actual delivery date from said set of potential delivery dates.

16. The method of managing the delivery schedule as recited in claim 10, wherein the step of calculating a first potential arrival date of the order further comprises the step of selecting the first potential arrival date from a supplier ship schedule based on the day the order is placed plus a fixed delay.

17. The method of managing the delivery schedule as recited in claim 16, wherein the step of determining the ability of the respective delivery agent to ship further comprises the step of calculating the number of slots to be shipped from a work unit matrix.

18. The method of managing the delivery schedule as recited in claim 17, further comprises the step of multiplying each item in the order by a work unit selected from a work unit matrix to determine the number of slots for each order.

19. The method of managing the delivery schedule as recited in claim 17, wherein the step of determining when there is sufficient capacity to ship the order further comprising the step of determining the first available date that the order can be completely shipped to the buyer based on a capacity matrix and based on the number of available delivery slots.

20. The method of managing the delivery schedule as recited in claim 18, further comprising the step of updating the electronic manifest with said actual ship date and the respective additional capacity utilized.

5 21. The method of managing the delivery schedule as recited in claim 17, further comprising the step of getting the zip code to which the order is to be delivered and the brand of the respective good in the order.

22. The method of managing the delivery schedule as recited in claim 21, further comprising the step of getting a respective supplier ship schedule based on the zip code and brand of good ordered.

10 23. The method of managing the delivery schedule as recited in claim 22, further comprising the step of selecting a delivery agent and a respective capacity matrix based on the zip code of the order.

15 24. The method of managing the delivery schedule as recited in claim 23, further comprising the step of determining the first potential ship date to the buyer's address based on the capacity of the delivery agent and the delivery schedule of the delivery agent.

20 25. The method of managing the delivery schedule as recited in claim 15, wherein said order information comprises data selected from the group including, the order date, the model number, the quantity of items, the brand of the item, the service to be selected, the requested delivery date, the buyer's delivery address, the security level clearance, and status information.

25 26. A computer program storage medium readable by a computer system and encoding a computer program of instructions for executing a computer process for managing deliveries of a goods delivery system, the system employed to deliver an order from at least one supplier to a respective delivery agent, and from the delivery agent to a respective buyer, given order information, said computer process comprising the steps of:

determining a first potential arrival date of the order to a respective delivery agents location, based on the order request date and the buyer's address;

determining the ability of the respective delivery agent to ship the order based the first potential arrive date request; and

5 determining a delivery date to the buyer when there is sufficient delivery agent capacity to ship the order to the buyer's address.

10 27. The computer process as recited in claim 26, wherein the step of calculating a first potential arrival date of the order further comprises the step of selecting the first potential arrival date from a supplier ship schedule based on the day the order is placed plus a fixed delay.

28. The computer process as recited in claim 27, wherein the step of determining the ability of the respective delivery agent to ship further comprises the step of calculating the number of slots to be shipped from a work unit matrix.

15 29. The computer process as recited in claim 28, further comprises the step of multiplying each item in the order by a work unit selected from a work unit matrix to determine the number of slots for each order.

20 30. The computer process as recited in claim 29, wherein the step of determining when there is sufficient capacity to ship the order further comprising the step of determining the first available date that the order can be completely shipped to the buyer based on a capacity matrix and based on the number of available delivery slots.

31. The computer process as recited in claim 29, further comprising the step of updating the electronic manifest indicating the order ship date and the additional capacity utilized.

25 32. The computer process as recited in claim 28, further comprising the step of getting the zip code to which the order is to be delivered and the brand of the respective good in the order.

33. The computer process as recited in claim 32, further comprising the step of getting a respective supplier ship schedule based on the zip code and brand of good ordered.

5 34. The computer process as recited in claim 33, further comprising the step of selecting a delivery agent and a respective capacity matrix based on the zip code of the order.

35. The computer process as recited in claim 34, further comprising the step of determining the first potential ship date to the buyer's address based on the capacity of the delivery agent and the delivery schedule of the delivery agent.

10 36. The computer process as recited in claim 26, further comprising the step of allowing order changes to be made based on the users security level clearance.

37. The computer process as recited in claim 36, further comprising the step of updating the electronic manifest with status information.

15 38. The computer process as recited in claim 37, further comprising the step of running said delivery management system when a reschedule has been requested.

20 39. The computer process as recited in claim 26, wherein said order information comprises data selected from the group including, the order date, the model number, the quantity of items, the brand of the item, the service to be selected, the requested delivery date, the buyer's delivery address, the security level clearance, and status information.

40. An apparatus for managing the delivery of an order from at least one supplier to a respective delivery agent, and from the delivery agent to a respective buyer, given order information, said apparatus comprising:

25 means for determining a first potential arrival date of the order to a respective delivery agents location, based on the order request date and the buyer's address;

means for determining the ability of the respective delivery agent to ship the order based the first potential arrive date request;

means for determining a delivery date to the buyer when there is sufficient delivery agent capacity to ship the order to the buyer's address; and

- 5 means for updating the electronic manifest indicating the order ship date and the additional capacity utilized.